

Date: Monday, 02/02/2009 11:50:12 AM
 User: Julie Dawson

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	STEP SPACER
Job Number :	45395B		
Estimate Number :	10378		
P.O. Number :		Part Number :	D30653
This Issue :	02/02/2009	S.O. No. :	
Prsht Rev. :	NC	Drawing Number :	D3065 REV. B
First Issue :	1 /	Project Number :	N/A
Previous Run :	44395B	Drawing Revision :	B
Written By :		Material :	
Checked & Approved By :	<u>JLD 09.02.02</u>	Due Date :	15/02/2009
Comment :	Est:C 02.11.01 Incorporated D3066-1 IPP KJ/RF		
	Est Rev:D Now on Water Jet 06-04-11 JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M2024T3S040	2024-T3 .040 sheet
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Comment: Qty.: 0.2287 sf(s)/Unit Total : 13.7214 sf(s)
 Material: 2024-T3 (QQ-A-250/4) 0.040" thick
 (M2024T3S.040) Batch: 110337

ml 09 02 19

2.0	WATER JET	FLOW WATER JET
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Comment: FLOW WATER JET
 1-Cut as per Dwg D
 Dwg Rev: B
 Prog Rev: B

2-Deburr if necessary

ml 09 02 19

(60)

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	----------------------------------------



ml 09 02 18

(60)

**Comment:** INSPECT PARTS AS THEY COME OFF MACHINE

4.0	QC8	SECOND CHECK
-----	-----	--------------



209-02-19

(57)



(PTC)

Comment: SECOND CHECK

counted

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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N/A



Comment: SMALL & MEDIUM FAB RESOURCE 1
 Deburr Stack

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3065-3 PAR #: PLA Fault Category: Prod/Inb. Assy made 5m/1 NCR: (Yes) No DQA: D Date: 09/02/25
 Resolution: Scrap Disposition: SCRAP QA: N/C Closed: D Date: 09/02/25

NCR: <u>45395B</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09-02-19	4.0	3 parts were found with blow-out around some rivet holes, due to piercing on the W.Jet. R.C. process / pressure blow out	 05/04/2	Scrap; No replace Qty 3	 09 02 19	 09-02-19	 05/04/2	 09-02-19

NOTE: Date & initial all entries

Date: Monday, 02/02/2009 11:50:12 AM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEP SPACER

Job Number: 45395B

Part Number: D30653

Job Number:



Seq. #:	Machine Or Operation:	Description :
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6.0	BRAKE NC	NC BRAKE
-----	----------	----------



Comment: NC BRAKE
Bend as per Dwg D3065

SB 09/02/20 57

7.0	QC5	INSPECT WORK TO CURRENT STEP
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Comment: INSPECT WORK TO CURRENT STEP

09-02-20 (57)
counted

8.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
-----	-----------------	----------------------------



Comment: HAND FINISHING RESOURCE #1
Chemical Conversion Coat as per QSI 005 4.1

FX 09/02/23 (57)

9.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
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Comment: INSPECT CHEMICAL CONVERSION COAT

09-02-23 (57)

10.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1
Identify and Stock
Location: C-A

09/02/24 (57)

11.0	QC21	FINAL INSPECTION/W/O RELEASE
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Comment: FINAL INSPECTION/W/O RELEASE

09/02/24

Job Completion



U 09-02-24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: N15391513
Description: Step Spacer		Part Number: D3065-3
Inspection Dwg: D3065	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.260	+/-0.010	1.263	✓		vern	
3.260	+/-0.010	3.261	✓		vern	
5.260	+/-0.010	5.262	✓		vern	
6.520	+/-0.010	6.523	✓		vern	
2.093	+/-0.010	2.100	✓		vern	
3.936	+/-0.010	3.942	✓		vern	
4.186	+/-0.010	4.189	✓		vern	
Ø0.128	+0.005/-0.000	0.128	✓		vern	
Ø1.250	+0.005/-0.000	1.250	✓		vern	
Pitch 1.204	+/-0.005	1.208	✓		vern	
0.040	+/-0.010	0.040	✓		vern	

Measured by: M.M	Audited by: J	Prototype Approval:	N/A
Date: 09.02.19	Date: 10.02.19	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.02.25	New Issue P/O D3065-041	KJ/RF	
B	04.08.12	Removed dimension 1.204	KJ/JLM	
C	06.06.23	Dwg Rev. changed	KJ/JLM	
D	07.09.06	0.040 dimension added	KJ/JLM	AF

~~REV~~

W/O:		WORK ORDER CHANGES					
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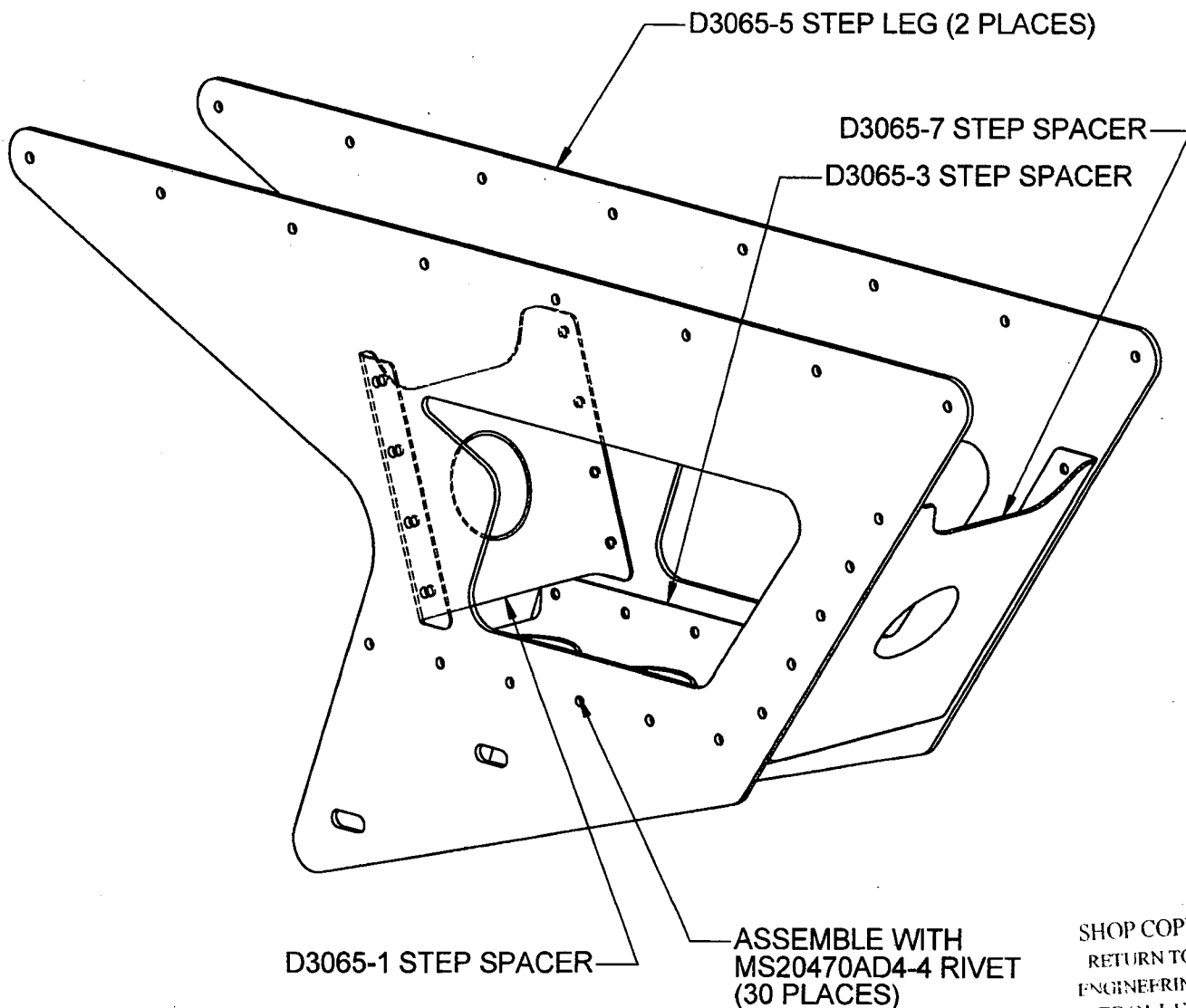
NOTE: Date & initial all entries



DESIGN <i>CP</i>	DRAWN BY <i>CB</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3065	REV. B SHEET 1 OF 5
DATE 06.05.23		TITLE STEP LEG ASSEMBLY	SCALE 1:2
A	02.09.11	NEW ISSUE	
B	06.05.23	ADD 6061-T6 MATERIAL, ADD SLOTS TO D3065-5	

RELEASED

06.06.20 *[Signature]*



D3065-041 STEP LEG ASSEMBLY

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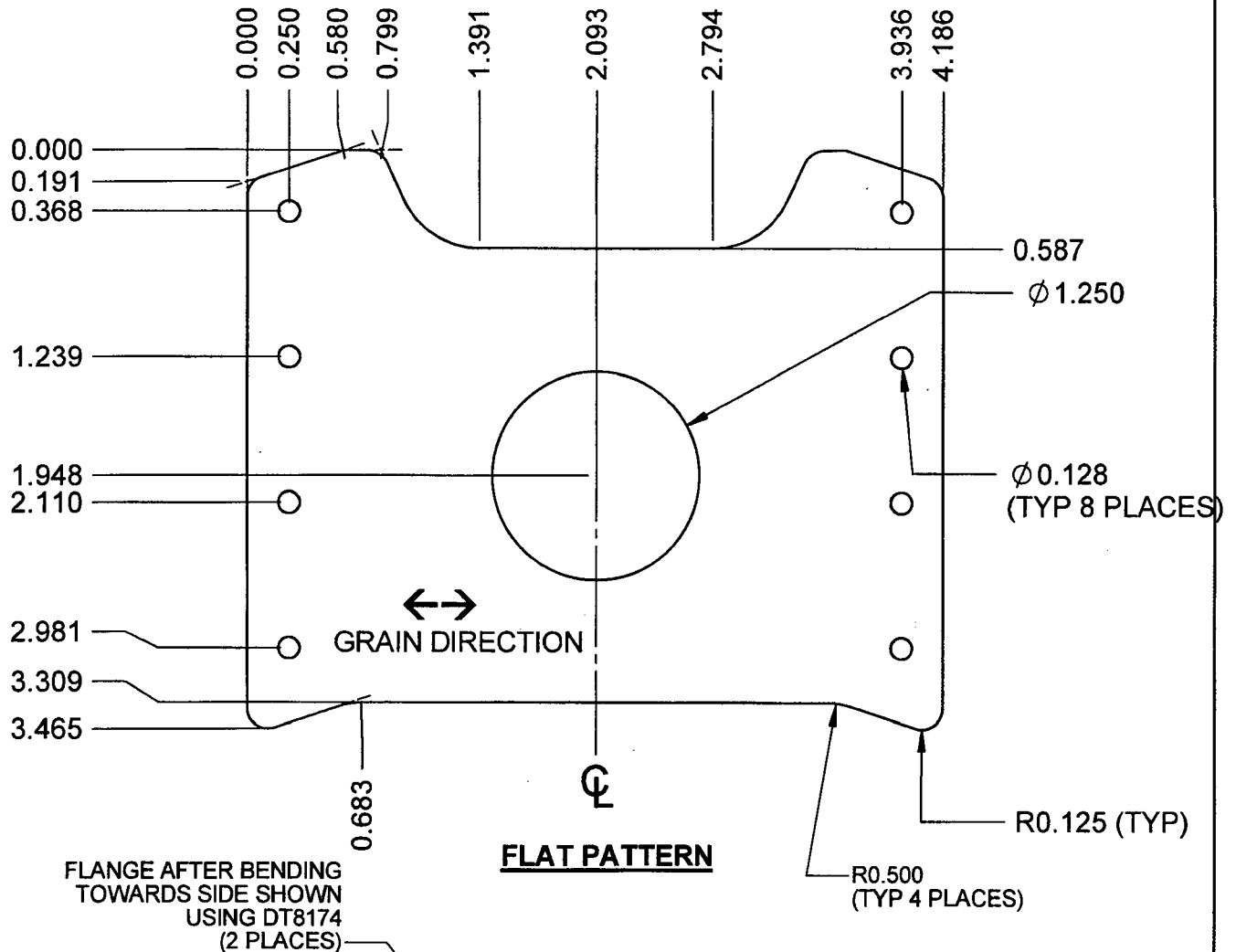
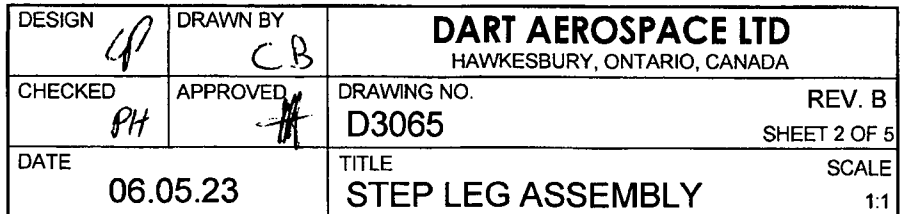
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



de de-20

BEND DETAIL

- 1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.040 THICK (REF DART SPEC. M20)
2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
3) BREAK ALL SHARP EDGES 0.005 TO 0.010
4) PART IS SYMMETRIC ABOUT CENTERLINE
5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
6) ALL DIMENSIONS ARE IN INCHES

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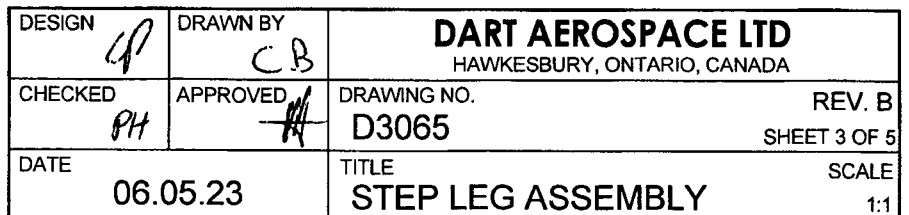
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

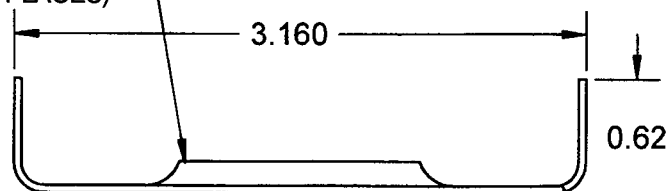
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



RELEASED

de de 20



BEND DETAIL

D3065-3 STEP SPACER

- 1) MATERIAL: 2024-T3 (QQ-A-250/4)
0.040 THICK (REF DART SPEC. M2024T3S.040)
2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
3) PART IS SYMMETRIC ABOUT CENTERLINE
4) BREAK ALL SHARP EDGES 0.005 TO 0.010
5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
6) ALL DIMENSIONS ARE IN INCHES

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

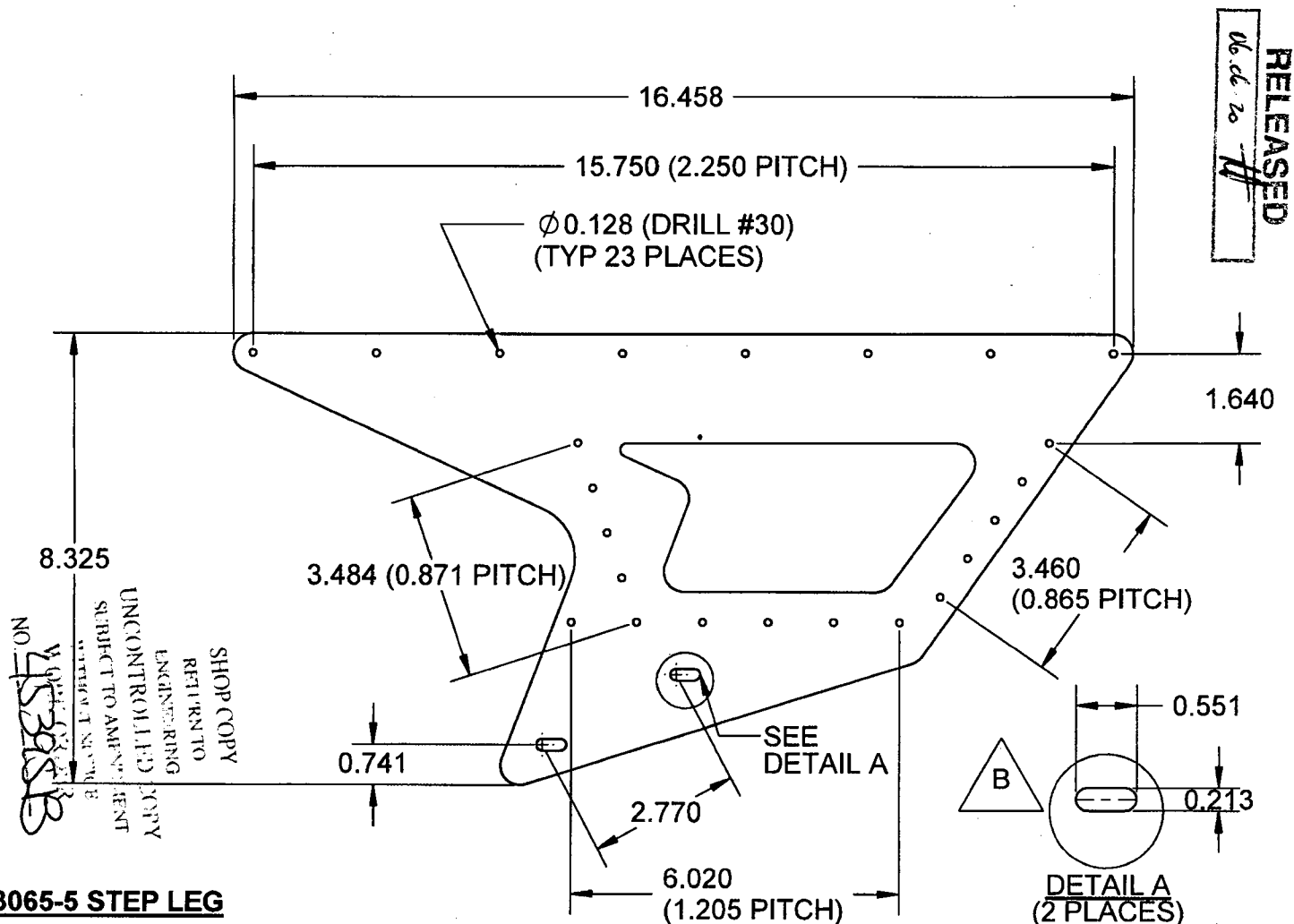
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
C.P.	C.B.		
CHECKED	APPROVED	DRAWING NO.	REV. B
R.H.		D3065	SHEET 4 OF 5
DATE	TITLE	SCALE	
06.05.23	STEP LEG ASSEMBLY	1:3	



D3065-5 STEP LEG

- 1) MACHINE PER DWG FILE "D3065-5.SLDPRT"
- 2) MATERIAL: 6061-T6 (PER QQ-A-250/11 OR AMS 4025 OR AMS 4027) 0.080" THICK
(REF DART SPEC M6061T6S.080)
OR
5052-H32 (PER QQ-A-250/8 OR AMS 4016) 0.080 THICK (REF DART SPEC. M5052H32S.080)
- 3) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

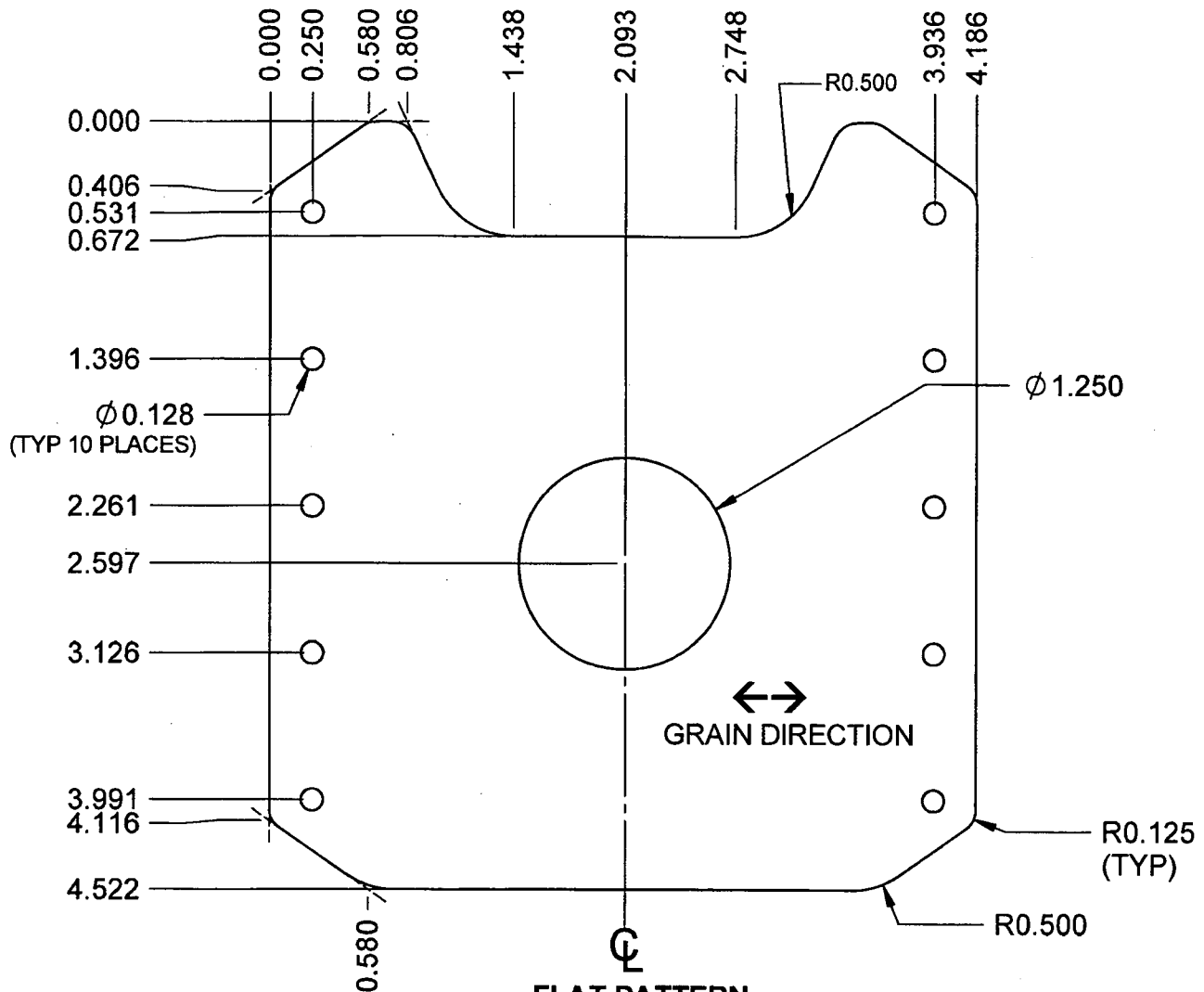
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN <i>UP</i>	DRAWN BY <i>CB</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3065	REV. B SHEET 5 OF 5
DATE 06.05.23		TITLE STEP LEG ASSEMBLY	SCALE 1:1



FLANGE AFTER BENDING TOWARDS
SIDE SHOWN USING DT8174 (2 PLACES)

FLAT PATTERN

RELEASED

de de re

BEND DETAIL

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WITHOUT NOTICE
WORK ORDER
NO **45395B**

D3065-7 STEP SPACER

- 1) MATERIAL: 2024-T3 (PER QQ-A-250/4) 0.040 THICK (REF DART SPEC. M2024T3S.040)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 3) PART IS SYMMETRIC ABOUT CENTERLINE
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries